BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the)	
Commission's Proposed Policies)	
Governing Restructuring California's)	
Electric Services Industry and)	R.94-04-031
Reforming Regulation)	(Filed April 20, 1994)
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Order Instituting Investigation on the)	
Commission's Proposed Policies)	I.94-04-032
Governing Restructuring California's)	(Filed April 20, 1994)
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WORKING GROUP REPORT CONCERNING THE INTEGRATION OF CERTAIN PUBLIC PURPOSE PROGRAMS

Prepared by the Energy Efficiency and RD&D Integration Working Group Submitted October 4, 1996

Commissioner Josiah L. Neeper Assigned Commissioner on Public Purpose Programs California Public Utilities Commission 505 Van Ness Avenue, Room 5213 San Francisco, CA 94102-3298

Re: Submittal of the EE and RD&D Integration Working Group Report

Dear Commissioner Neeper:

The Energy Efficiency (EE) and Research, Development and Demonstration (RD&D) Integration Working Group hereby submits its Integration Report on specified public purpose programs as requested in the Joint Assigned Commissioners' Ruling (JACR) dated June 6, your letter to Michael Messenger dated June 25, and the JACR dated September 4, 1996. This Integration Report contains information about the interrelationship and need for coordination of various functional, funding and/or governance topics pertaining to the EE and RD&D programs, as authorized by Assembly Bill (AB) 1890, and discussed in the EE and RD&D Working Group Reports submitted to the California Public Utilities Commission on August 16 and September 6, 1996, respectively.

In accordance with the JACR dated September 4, parties anticipate filing their Opening Comments concerning this Integration Report on October 24, and their Reply Comments will be filed on November 1, 1996. On behalf of the Integration Report Working Group, I thank you for considering the enclosed material and look forward to working with you further on this important topic in the near future.

Sincerely,

Mike DeAngelis, on behalf of the EE and RD&D Integration Working Group:

California Energy Commission Staff
Electric Power Research Institute
Environmental Marketing Group
Natural Resources Defense Council
Pacific Gas & Electric Company
San Diego Gas & Electric Company
Southern California Edison Company
Southern California Gas Company
University of California

cc: All CPUC Commissioners CPUC Docket Office Michelle Cooke, CACD Restructuring Mailing List

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WORKING GROUP REPORT CONCERNING THE INTEGRATION OF CERTAIN PUBLIC PURPOSE PROGRAMS

I. INTRODUCTION

A. Background

In early 1996, the California Public Utilities Commission (CPUC) requested participants in California's electric industry restructuring process to form Working Groups to address various issues concerning public purpose programs, including energy efficiency (EE), and research, development and demonstration (RD&D) activities. The RD&D and EE Working Groups each prepared and submitted separate reports to the CPUC containing discussions of the issues and recommendations on these topics. ¹

Subsequently, in a Joint Assigned Commissioners' Ruling (JACR) dated June 6, 1996, the CPUC indicated that many restructuring issues would need to be coordinated, and that the options for implementing the public goods charge pertaining to RD&D and EE activities should be integrated (JACR, pp. 5-6). Thereafter, Commissioner Josiah Neeper (coordinating commissioner for public purpose programs) specified that a separate "integration report" concerning RD&D and EE activities was to be submitted to the CPUC on October 4, 1996, following completion of the individual Working Group reports on RD&D and EE activities. In response to these directions members of the RD&D and EE Working Groups held three joint meetings over a one month period to discuss and prepare this Integration Report.

On September 23, 1996 Governor Pete Wilson signed into law Assembly Bill (AB) 1890 concerning electric industry restructuring in California. This law resolves some of the issues that were raised in one or both of the Working Group reports on RD&D and EE. In doing so, AB1890 also dealt with some of the integration issues that this report would otherwise have raised. In particular, AB1890 addressed and resolved the following specific issues related to RD&D and EE programs:

(1) For electrical corporations and publicly-owned utilities the costs of EE and public interest RD&D programs will be recovered through a nonbypassable, usage-based, rate

¹ See Funding and Administering Public Interest Energy Efficiency Programs: The Report of the Energy Efficiency Working Group., August 16, 1996, P 300-96-004; and Working Group Report on Public Interest RD&D Activities., September 6, 1996, P 500-96-010. These reports and related appendices can be obtained from the California Energy Commission's publications office. These reports will also be available for a limited time on the CEC's internet web page on restructuring issues (http://www.energy.ca.gov/energy/restructuring/integration/).

² Letter from Commissioner Josiah Neeper to the EE Working Group, care of Mike Messenger, July 25, 1996.

- component of local distribution service (Public Utilities Code, Sections 381(a) and 385(a));
- (2) The funding level to be provided by SDG&E, SCE, and PG&E for cost-effective EE and conservation activities is not less than \$228 million per year for 1998, 1999 and 2000, and \$178 million for 2001 (Public Utilities Code, Section 381(c)(1));
- (3) The funding level to be provided by SDG&E, SCE, and PG&E for public interest RD&D programs to advance science or technology that are not adequately provided by the competitive and regulated markets is not less than \$62.5 million per year for 1998 through 2001 (Public Utilities Code, Section 381(c)(2));
- (4) The CPUC shall determine how to utilize the funds collected for specified RD&D and EE activities, provided that only those RD&D funds for transmission and distribution functions shall remain with the regulated private utilities under the supervision of the Commission. All other RD&D funds collected for public interest RD&D will be transferred to the California Energy Commission (CEC) pursuant to administration and expenditure criteria to be established by the Legislature (Public Utilities Code, Section 381 (f)); and
- (5) Each local publicly-owned electric utility (e.g., municipal utilities) shall establish a nonbypassable, usage based charge on local distribution service of not less than a level determined on a specified percentage of revenue basis, to fund investments by the utility and other parties in any or all of the following: a) cost-effective demand-side management services; b) new investment in renewable energy resources and technologies; c) RD&D programs for the public interest to advance science or technology which is not adequately provided by competitive and regulated markets; and d) services provided for low-income electricity customer[s], including but not limited to, targeted energy efficiency and rate discounts (Public Utilities Code, Section 385).

B. Purpose of this Integration Report

The major purpose of this Integration Report is to describe key interrelationship issues between the RD&D and EE programs, as described in the Working Group reports and AB 1890, which need to be addressed by policy makers to promote efficient and effective use of public interest funds. The RD&D Report states that "surcharge funded public interest RD&D activities should focus primarily on energy efficiency, renewable technologies and environmental issues" (RD&D Report, p. 3-2). Because energy efficiency is a primary focus of the RD&D program, that program needs to be coordinated with the EE program. Likewise, because renewable technologies are also a primary focus of the RD&D program, coordination is desirable between the RD&D and Renewables programs.

The restructuring of the electric services industry and the passage of AB 1890 provide an opportunity to create positive linkages between RD&D and EE programs. Parties who participated in the preparation of this report agree that there is also a need for policy makers to recognize and

address the issue of coordination with the state's renewable technology programs, particularly since AB 1890 now funds these renewable programs through a nonbypassable electricity usage charge as well. However, since the Integration Working Group was only established to address RD&D and EE issues pursuant to the CPUC's direction, our comments concerning integration of the renewable generation programs are limited.

The following sections of this Integration Report will discuss areas where coordination and/or integration regarding various functional, funding and/or governance issues pertaining to both RD&D and EE activities could improve the effectiveness of the RD&D and EE programs. Other coordination issues are also identified in the final section of this report.

II. FUNCTIONAL COORDINATION ISSUES RELATED TO BOTH THE RD&D AND EE PROGRAMS

A. Introduction Concerning Functional Coordination Issues

This section of the Integration Report provides a discussion of the potential for functional overlaps between the public interest RD&D and EE program efforts. Policy makers should recognize that some functional overlaps may exist between public interest RD&D and EE programs. This is so because, conceptually at least, it is possible to view some RD&D and EE activities as a sequence of events that take place along a continuum. For example, Figure 1 below provides a depiction of this process-oriented view as it might apply to a particular energy efficiency technology or service moving through the RD&D and EE programs.

Figure 1
Sequence of Technology Development

Research \Rightarrow Development \Rightarrow Demonstration \Rightarrow

⇒ Commercialization and/or Market Transformation ⇒

 \Rightarrow Broad Market Acceptance

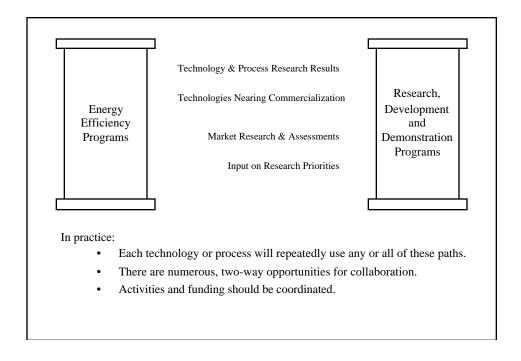
The top row of activities in Figure 1 represents those functions commonly considered to fit within the traditional definitions of RD&D activities. The second row of activities represents a "gray area" of potential functional overlaps between RD&D "commercialization" activities and EE "market transformation" activities that are addressed in both the RD&D and EE Working Group Reports. This "gray area" of potential functional overlaps between the RD&D and EE programs is discussed in greater detail below. The bottom row represents the end result of a successful technology development effort.

The linear process described in Figure 1 for bringing new technologies into the market is appealing because of its simplicity. However, in the real world technology development rarely proceeds in such an orderly fashion. For example, market transformation activities may include some demonstration projects. Another weakness of the linear model is that many RD&D projects do not directly produce technologies or processes that are widely accepted in the market place. Instead, they contribute to our knowledge of what does and does not work. They also strengthen the RD&D infrastructure by giving experience to researchers and guiding them to successful technologies and processes.

Figure 2, below, shows how information flowing through feedback loops affects the linear process portrayed in Figure 1. For example, public interest RD&D programs may provide technologies or processes for adoption through EE program efforts. Similarly, EE market research and assessments may provide information on various market factors (e.g., lack of product availability, specific customer preferences, etc.) which will improve the productivity of the RD&D program.

Figure 2

Primary EE/RD&D Functional Information Flows



These feedback loops are an important reason for coordination between the RD&D program and EE program (as well as the Renewables program). This exchange of information is particularly important for technologies or processes that are nearing commercial viability. The probability of success for each of these programs will be significantly increased if mechanisms are created that facilitate the flow of information and provide incentives for cooperation. We discuss mechanisms for coordination at greater length in Section IV of this report.

B. Potential Functional Coordination Issues Specifically Pertaining to RD&D Activities

The definitions of RD&D activities below are drawn from the RD&D Report. These RD&D definitions are provided in this Integration Report as a means of further identifying specific areas where the potential for functional overlaps between the RD&D and EE programs exist.

Research, development and demonstration (RD&D) is the process of advancing science and technology from the initial stages of exploring a concept, through the laboratory and

applications-testing of components and systems, to the eventual introduction into the market. RD&D consists of three elements - research, development and demonstration - defined as follows:

- (a) Research: The process used to discover fundamental new knowledge;
- (b) *Development:* The application of new knowledge to develop a potential new technology or product;
- (c) *Demonstration:* The early application and integration of a new technology or product into an existing system (RD&D Report, p.2-3).

Efforts required to effectively implement a cost effective EE program will require some "research," some "development," and/or some "demonstration" activities as these terms are defined above. Electricity industry restructuring provides an opportunity to create strong coordination mechanisms in these RD&D areas of potential functional overlap.

C. Potential Functional Coordination Issues Specifically Pertaining to Commercialization and Market Transformation Activities

1. Definition of Commercialization Activities in the RD&D Report

At the end of the RD&D process there is a "broad spectrum of activities that comes under the rubric of commercialization" (RD&D Report, p. 2-4). In the RD&D Report "commercialization" activities are described as follows:

"[Commercialization activities] are all aimed at reducing market barriers that would slow or prevent technologies or products from reaching consumers" (RD&D Report, p. 2-4).

The focus on activities that reduce market barriers in this description should be compared with the EE Report's definition of "market transformation" activities.

2. Definition of Market Transformation Activities in the EE Report

Most of the members of the EE Working Group agreed upon the following interim definition of market transformation:

"Publicly-funded market transformation activities are designed to achieve long-lasting changes in the structure or operation of the market by reducing market barriers to the adoption of cost beneficial EE measures to the point where further public intervention is no longer appropriate in that specific market segment" (EE Report, p. 2-3).

3. <u>Functional Overlaps Between RD&D Commercialization and EE Market Transformation</u> Activities

As can be seen above, the parallel scope of activities described by the RD&D Report's definition of "commercialization" and the EE Report's definition of "market transformation" clearly gives rise to the potential for functional overlaps. Members of the RD&D Working Group expressed "differing views about what commercialization activities, if any, should be specifically financed with public interest RD&D surcharge funds" (RD&D Report, p. 3-3). While the RD&D Working Group supports the pursuit of "limited scale" commercialization activities (e.g., identifying legal/regulatory market barriers, providing impartial information), there was no consensus that it would be appropriate to use RD&D surcharge funds to pursue "larger scale" commercialization activities (RD&D Report, p. 3-3). Thus, depending on what scope of RD&D commercialization and EE market transformation activities are ultimately implemented, the potential for functional overlaps between the RD&D and EE programs could increase or decrease.

4. Options for Addressing Functional Overlaps

There are essentially three options for addressing potential functional overlaps between the RD&D and EE programs. The first option is to eliminate all overlaps by establishing formal "bright line" separations between what may be implemented through the surcharge-funded RD&D and the surcharge-funded EE programs. The Integration Working Group does not believe that the CPUC should pursue this option at this time. The second option is to coordinate functional responsibilities by implementing a formal or informal coordination strategy. The Working Group recommends this as the preferred option. The third option is to not take any action aimed at eliminating or coordinating functional overlaps, and to simply allow these overlaps to occur.

III. FUNDING ISSUES RELATED TO BOTH THE RD&D AND EE PROGRAMS

Many of the funding issues that were described in the RD&D and EE Reports are specifically addressed in AB 1890. As described in Section I of this Integration Report, the legislation directs the CPUC to order the respective electrical corporations to collect and spend "not less than" certain specified levels of funds for cost-effective energy efficiency and conservation activities, and for RD&D activities to advance science or technology that are not adequately provided by competitive and regulated markets (Public Utilities Code, Section 381 (c)(1)(2)). The legislation also requires each local publicly-owned electric utility to establish a usage based charge of "not less than" a specified level to fund investments by the utility and other parties in a number of public interest areas, including RD&D and EE programs (Public Utilities Code, Section 385 (a)(1),(3)).

Both the RD&D and EE Reports were drafted and filed before AB 1890 was signed into law. Recognizing this, the CPUC has asked parties to provide comments by October 7th regarding the effect of AB 1890 on the Working Group Report recommendations. Accordingly, this issue is not addressed in this Integration Report. This report does address, however, those common and/or

ntegration funding issues that remain even though certain other funding issues have been resolved by AB 1890.	[

A. Common Funding Issues Related to Both the RD&D and EE Programs

1. Determination and Possible Adjustment of Program Funding Levels

AB1890 provides that electric IOUs and publicly-owned utilities shall collect and spend "not less than" certain specified levels for public interest RD&D and cost effective EE programs. Some parties believe that the amounts set forth in AB 1890 should be viewed as the actual funding levels, while other parties believe that higher funding levels are allowed by AB 1890 in these areas. Some parties believe that the CPUC needs to address this funding level issue.

In addition, some parties believe that the potential linkage between RD&D and EE program activities may create a need for coordination in determining the RD&D and EE program funding levels. This coordination would occur between organizations with responsibilities for implementing public interest RD&D and EE programs beginning in 1998. The CPUC has primary jurisdiction over the collection and utilization of funds in these areas, but it has been directed to transfer all public interest funds other than those for transmission and distribution functions to the CEC pursuant to administration and expenditure criteria to be established by the Legislature. Therefore, some members of this Integration Working Group believe that it is important for the CPUC and the CEC develop and implement a coordination strategy to resolve these types of funding level issues. Other parties believe that AB 1890 sets the actual RD&D and EE funding levels, and therefore coordination of funding level issues is unnecessary. These parties believe that the functional coordination discussed in Section II, above, is sufficient.

Another funding issue concerns the parity of public purpose program funding levels across utilities. If the specific funding levels contained in AB1890 are adopted by the CPUC, then different proportions of each customer's bill in the SCE, SDG&E and PG&E service areas will go to fund public benefits projects. This may be in conflict with an earlier CPUC decision that called for a uniform surcharge. Table 1 below illustrates the disparities using 1994 IOU electricity revenues as the basis for comparison with the funding minimums contained in AB 1890.

Table 1

Comparison of Minimum AB 1890 Public Purpose Funding Levels
With 1994 IOU Electricity Revenues (\$ millions)

		Minimum		Minimum		Minimum	% of 1994		Rate
			AB 1890 RD&D funds	AB 1890 Low income*	AB 1890 Renewables	AB1890 Totals		Sales GWH	Component mills/kWh
PG&E	\$8,109	\$106	\$30	\$51	\$48	\$235	2.9%	71,510	3.3
SCE	\$7,791	\$90	\$29	\$43	\$49	\$210	2.7%	71,663	2.9
SDG	\$1,510	\$32	\$4	\$14	\$12	\$62	4.1%	15,380	4.0
&E									
Total	\$17,410	\$228	\$63	\$108	\$109	\$507	2.9%	158,553	3.2

^{*} CARE numbers are actual fund outlays for the 15% low income discount in 1995. Direct Assistance (DA) uses the 1996 authorized level for each utility.

Some parties feel that this differential in rates may lead to competitive distortions in the marketplace as suppliers attempt to compete by luring customers to their service territory with the promise of a lower public goods charge. Other parties are willing to live with these differences in rates for a variety of reasons. One reason is that, as mentioned earlier, some parties believe that, in light of the rate freeze provisions of the overall legislative package, AB 1890 specifies the funding levels to be collected and spent for public interest programs through 2001. Another reason is that the magnitude of the public goods component is not nearly as large as the customer's total electricity bill, or the Competition Transition Charges also due to take effect on January 1, 1998. Therefore, some parties feel that any competitive distortion caused by public purpose program funding is negligible.

Finally, certain members of the Integration Working Group also believe that it may be beneficial to modify the level of funding for RD&D and/or EE programs over time, either before or after the year 2001. The following quotes from the EE Report tend to support that position:

The level of expenditures required to support EE programs through a PGC is a function of the goals adopted for the programs by the Legislature or governmental bodies, trends in energy prices, how well the private market for EE is functioning, the strategies proposed for the use of the funds, and the types of administration used to oversee how the funds are spent. Accordingly, the amount of money necessary to achieve these goals is likely to change over time and should be modified periodically (EE Report, p. 3-6).

After the initial surcharge level is set, provision should be made for modifications to this level to reflect the success or failure of these [EE] programs. How often these adjustments need to be made is in part a function of which administration and supporting delivery system options are chosen (EE Report, p. 3-16).

Some parties believe that similar funding concerns pertaining to RD&D activities may justify a coordinated review of these funding issues for both programs. Other parties believe that such a review is unnecessary given the provisions of AB 1890.

2. Need For A Timely Decision Regarding Collection of Program Funds

Utility staffs are currently working on changing their billing format systems to accommodate multiple charges for generation, transmission, distribution, public goods and competitive transition charge (CTC) costs. These analysts need to know how much revenue must be raised for these functions well before the January 1, 1998 deadline. Therefore, it is important for the CPUC to either make this decision or to outline a process for making this decision quickly, so that billing procedures can be adjusted in a timely manner.

B. Integration Issues Related to Funding The RD&D and EE Programs

Within the categories of RD&D and EE it will soon be necessary for program planners and managers to identify the specific types of activities that will be supported with public purpose funds. Although there are potential functional overlaps, as described earlier in Section II of this report, the Integration Working Group members generally agree that the focus of the public interest RD&D program should be upon RD&D activities (as opposed to commercialization or market transformation activities), and the focus of the EE program should be upon market transformation activities (as opposed to RD&D activities). The RD&D and EE Reports provide the following recommendations about the types of activities to which program funds should be allocated.

The RD&D Working Group members agreed that "surcharge funded public interest RD&D activities should focus primarily on energy efficiency, renewable technologies and environmental issues." (RD&D Report, p. 3-2). However, the RD&D Report did not address specific mechanisms for allocating RD&D surcharge funds among these public interest activities. Instead the RD&D Working Group intended to preserve flexibility by allowing the RD&D administrator to make this determination. While RD&D activities pertaining to energy efficiency projects clearly need to be coordinated with the EE program, the Integration Working Group recognizes that some RD&D activities related to renewable technologies (e.g. photovoltaics for demand-side management) and environmental projects may need to be coordinated with the EE program as well.

Commercialization and market transformation activities are also an area of potential overlap between RD&D and EE activities. The EE Report recommends an extensive market transformation mandate for the EE program. The RD&D Working Group did not reach consensus on using RD&D surcharge funds for large-scale commercialization activities, but it did allow flexibility for the administrator to consider limited-scale commercialization activities. Therefore, on RD&D and EE funding allocations a mutual understanding of each program's direction will enable both programs to be responsive to each other's anticipated needs. Since the passage of AB 1890, some parties believe that the potential for overlap of commercialization activities between the RD&D and EE programs has diminished.

Commercialization and/or market transformation activities related to renewable generation technologies are also an obvious area of potential overlap between public interest RD&D and renewable technology programs. The authors of this Integration Report were unable to assemble a critical mass of representatives from the Renewables Working Group. However, the Integration Working Group believes that coordination efforts should also be made to clarify the relationship between the renewables activities and public interest RD&D activities supported by AB1890.

IV. GOVERNANCE ISSUES RELATED TO BOTH THE RD&D AND EE PROGRAMS

In the context of this Integration Report, "governance" refers to the institutional mechanisms by which public interest RD&D and EE programs are implemented, facilitated and rewarded (or, in the alternative, how accountability for failing to meet policy objectives is enforced). The potential

overlaps and/or the need for coordination in these governance efforts can arise wherever there are functional overlaps.

To better understand how these governance overlaps can arise, and their effects if they do, it is useful to first look at the primary governance functions that will be carried out using surcharge funds collected for public interest RD&D and EE activities. These functions are discussed below.

A. Primary RD&D Governance Functions

The RD&D Report identifies four primary governance functions to be carried out by the Research Organization (RO) in relation to surcharge-funded RD&D activities (RD&D Report, pp. 4-2 and 4-3). These primary governance functions are:

- (1) Policy making The Working Group agreed that the RO must carry out its various functions in a manner which is consistent with state energy policies. In addition, the RO will have and seek information and expert advice regarding public interest RD&D activities and needs in California. This information will allow the RO to make educated policy-level decisions concerning its own RD&D programs, and will also enable the RO to provide useful policy-level input to the Legislature and others.
- (2) Program planning The RO will need a plan for implementing its research program. This plan could result from either internal RO work which builds upon stakeholder and/or advisory committee input, or from a plan developed externally. The RO will also need to undertake some limited energy technology assessment activities (e.g., obtaining baseline costs and performance data) for plan evaluation purposes.
- (3) Implementing RD&D activities the RO must ensure that its RD&D plan is effectively and efficiently implemented. The RO will implement the RD&D activities in its plan primarily by contracting out this work to qualified individuals and/or companies. However, the [RD&D] Working Group does not intend to exclude the RO from participation in technology assessment and planning activities, or from personnel exchanges which enhance the RO's internal RD&D capabilities.
- (4) Program administration The RO must administer and manage the ongoing RD&D activities in its RD&D program. Administrative activities would include review and evaluation of program results, actions needed to maximize the productivity of RD&D contractors, and periodic progress reports to appropriate public oversight entities.

B. Primary Energy Efficiency Governance Functions

The EE Report also identified four primary governance functions that will take place in relation to surcharge-funded EE activities (EE Report, pp. 4-1 through 4-4). These primary governance functions as described in the EE Report are:

(1) Policy setting includes identification of who will be responsible for setting policy regarding what activities will be funded by the PGC and ensuring these funds are spent effectively to match state policy objectives. This includes a discussion of who will be responsible for selecting the members of the governing board, who will be accountable for the oversight of organizations charged with administration and management of PGC funds, and who will be responsible for setting overall policy guidelines and or budget priorities. Finally, this function includes the responsibility to enforce and adjudicate policy disputes and review, and perhaps approve, proposals to modify the strategies used to achieve objectives.

- (2) Administration and management describes the entities responsible for operational oversight of PGC funds. These responsibilities include . . . proposing budgets for specific programs and activities within the overall guidance provided above; procuring providers to deliver services or programs within approved budgets (including developing requests for proposals when needed); and tracking and reporting the PGC spending.
- (3) Implementation describes which entities or firms would be involved in the delivery of various types of PGC-funded EE services or activities. This category includes a description of (a) who would be eligible and responsible for implementing Board plans to effectively participate in regional/national upstream market transformation efforts; (b) who would be responsible for delivering more targeted, non-customer specific EE services or programs intended primarily to transform California or regional markets; and (c) who would deliver customer-specific energy services (such as the installation of more efficient equipment).
- (4) Market barrier assessment and program evaluation describes the entities or market participants responsible for planning and evaluation activities. These responsibilities include assessing overall progress by the programs in meeting specific market objectives and/or achieving reductions in market barriers; recommending new program designs and pilot programs based on these assessments and other evaluation research; and measuring the performance of specific programs either by verifying the energy savings achieved or gathering market data on other measures of program effectiveness.

C. Opportunities For Coordinating Governance of the RD&D and EE Programs

Given the overlapping functional and funding activities discussed in Sections II and III of this Integration Report, it is clear that there is a need to coordinate the governance mechanisms of the RD&D and EE programs. Similar governance coordination opportunities may exist regarding the Renewables program as well. The Integration Working Group agrees that program planning and administration activities are the governance areas which offer the greatest potential for beneficial coordination. One specific area of governance coordination concerns the development and use of sophisticated information systems and related data reporting conventions. Coordination of these systems should be maximized so that information can be readily exchanged between the public purpose programs.

There are four basic options for addressing the potential governing overlaps between RD&D and EE programs, as follows:

- (1) Create a single governing authority over all areas of RD&D and EE activities;
- (2) Jointly share the governing responsibilities between two or more governing authorities;
- (3) Develop and implement an effective coordination strategy between the various governing authorities; or

4) Do not coordinate, and simply allow the various governing authorities to act ndependently of each other.		

The Integration Working Group believes that option 4 should be avoided if at all possible. Although the group did not seek consensus regarding the other three options, the members did discuss possible coordination strategies which could be utilized in the event that option 3 is selected. These coordination strategies could consist of some or all of the following to aid both programs in their policy, planning and implementation functions: a) establish open information channels between the RD&D and EE programs (e.g., exchange program reports, etc.); b) create a joint advisory council; c) conduct formal joint meetings (e.g., quarterly) involving the administrators from both programs, as well as other interested parties; and/or d) create a formal memorandum of understanding (MOU) concerning all aspects of coordination and integration between the RD&D and EE programs.

V. OTHER COORDINATION ISSUES RELATED TO BOTH THE RD&D AND EE PROGRAMS

The final section of this report describes additional issues that the Integration Working Group finds important, but that do not fit neatly into any of the previous sections. The Working Group recognizes that in some cases the CPUC does not have the jurisdictional authority to require formal coordination to resolve these issues. Nonetheless, the Working Group urges the CPUC to seek other types of coordination mechanisms to address these important integration concerns, so that the RD&D and EE programs may be implemented in an efficient and equitable manner throughout the state.

A. Coordination With Natural Gas RD&D and EE Programs

The CPUC's restructuring "roadmap" decision (D.96-03-022) directed each Working Group to address natural gas program impacts. There was no unanimity within each Working Group on whether to include natural gas or an associated funding level.³ Each group developed its report recommendations with the premise that the surcharge for public interest programs would be "non-bypassable." AB 1890 establishes funding obligations for the IOUs, and an associated non-bypassable surcharge, but it does so only for electricity. Therefore, the natural gas question remains an unresolved issue. Some parties feel that if this issue is not resolved then, as discussed in both the RD&D and EE reports, it may cause competitive distortions in the market (EE Report, p. 3-1; and RD&D Report, pp. 3-17 and 3-18). This is a concern for other public purpose programs as well.

In addition to the unresolved question of whether a public goods charge for RD&D and EE programs should extend to natural gas customers, there is a related question concerning how to effectively coordinate those RD&D and EE activities that overlap between both electricity and natural gas. Options for resolving one or both of these issues are as follows:

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³ Most members of the RD&D and EE Working Group concluded that the surcharge should apply to both electricity and natural gas customers. However, one party in each of these Working Groups disagreed (RD&D Report, p. 3-17; EE Report, p. 3-2).

the natural gas	J	3112 10,0,	

- (2) The CPUC could extend the requirement to unbundle public goods expenditures to natural gas utilities as a line item and/or require a minimum public interest funding level for gas UDCs;
- (3) The CPUC could require an advertising campaign or billing insert to explain why electricity and natural gas customers are paying different charges for various public goods activities, and simply encourage voluntary coordination efforts between the electricity and natural gas RD&D and EE programs; or
- (4) Policy makers could simply maintain the status quo regarding electricity/natural gas RD&D and EE issues.

B. Coordination With Municipal Utility RD&D and EE Programs

The AB 1890 restructuring legislation requires both IOUs and publicly-owned (e.g., municipal) utilities to collect and spend funds for public interest activities, and therefore certain common RD&D and EE issues need to be addressed. For example, if the IOUs and the municipal utilities cooperate to fund RD&D and EE programs on a reasonably equitable basis, and if they operate these programs in a complementary fashion, then all Californians could benefit through the statewide development and deployment of superior technologies and processes. Similarly, the IOU and municipal utility funded RD&D and EE programs could each benefit from periodic exchanges of information, and coordination of activities, once these programs are fully implemented. As such, a coordination strategy similar to that discussed in the governance section of this Integration Report (Section IV. C., above) should be established to ensure that these mutual benefits can be achieved. The California Municipal Utilities Association (CMUA) and/or the California Utilities Research Council (CURC) could be extremely helpful in developing the details of this coordination strategy.

AB1890 sets minimum funding levels but identifies no process or dates by which the actual spending levels will be approved by the CPUC or by the municipal boards. Ideally, all of these new charges would be made public at roughly the same time to minimize any confusion which might result if new rate structures appear every month, or in different cities in common regions.

Options to address both statewide and municipal issues related to RD&D and EE programs include the following:

- (1) The CPUC could institute a proceeding to develop mechanisms to ensure coordination with municipal utility RD&D and EE programs;
- (2) The CPUC could informally seek cooperation with the key municipal boards to encourage coordination of these RD&D and EE activities; or
- (3) The CPUC could make no attempt to coordinate these RD&D and EE activities with municipal utility boards.